

Dis-engage the diagnostics plug from its socket.

This is positioned at the rear of the engine bay on the passengers side on cavalier/calibra's, on the astra3 it's in the fusebox, and on vectra's around the handbrake.

It has 10 pins.

Short pins A & K to read the [ABS](#) codes. (for example)

The [ABS](#) warning light will start to flash as follows.

The code 12 is first flashed three times, this is a marker

If a code is stored it is then flashed three times.

The code 12 is then flashed three times, this is a separator

If a 2nd code is stored it is then flashed three times or the first code is repeated.

The code 12 is then flashed three times, this is a separator

etc

To clear codes you should disconnect the battery for a minimum of 10 minutes and then re-connect.

ABS. Short pins A and K on the diag plug

Early models which have the old ABS system where the control unit is located at the side of the passenger seat in a lump in the carpet do not usually have this fault code facility. Check whether the diag plug has a wire at location K.

Calibra 2WD H reg models should be able to read codes out.

16 LH Front Solenoid (Relay & Connections)
17 RH Front Solenoid (Relay & Connections)
18 Rear Solenoids (Relay & Connections)
19 Solenoids Relay Circuits
25 Faulty Sensor toothed Ring
35 Pump Relay Circuits
37 Stop Lamp Switch (Pedal Switch)
39 LH Front Speed Sensor (Air Gap & Operation)
41 LH Front Speed Sensor (Resistance & Connections)
42 RH Front Speed Sensor (Air Gap & Operation)
43 RH Front Speed Sensor (Resistance & Connections)
44 LH Rear Speed Sensor (Air Gap & Operation)
45 LH Rear Speed Sensor (Resistance & Connections)
46 RH Rear Speed Sensor (Air Gap & Operation)
47 RH Rear Speed Sensor (Resistance & Connections)
48 System Voltage High/Low (Alternator & Battery)
55 Faulty ECU

4x4. Short pins A and J on the diag plug

[15 Oil Temperature Sensor Voltage high](#)

24 No Speed Signal

31 No Engine RPM Signal

32 Pressure Switch Faulty

33 Solenoid Valve - Voltage High (on 1992 models will give this code if tx box overheated to 160°C) or if fuse 19 removed.

34 Solenoid Valve - Voltage Low

37 Brake Lamp Switch

[39 No ABS signal \(MPH\) or 0 MPH and 2300rpm for greater than 15 seconds](#)

55 ECU Faulty

[71 Brake switch Voltage high](#)

[72 Brake switch Voltage low](#)

[73 Car stopped without using brakes from speeds greater than 37mph](#)

[74 PAS pressure low, less than 10 bar](#)

[75 Oil Temperature Sensor Voltage low or](#)

Transfer box overheated to 160°C (or 140°C for speeds greater than 118mph)
Blue items apply only to Later models, approx 1994 Model year L reg which do not have mechanical speedo cables.

Traction Control Short pins A and J on the diag plug

Traction control fault codes

Thanks to Garrie N D

14 Coolant temperature sensor - voltage low (20XE only)
15 Coolant temperature sensor - voltage high (20XE only)
21 Throttle position sensor - voltage high (20XE only)
22 Throttle position sensor - voltage low (20XE only)
26 Traction control Throttle position sensor - voltage high
27 Traction control Throttle position sensor - voltage low
31 No Engine RPM Signal
37 Stop Lamp Switch (Pedal Switch)
39 LH Front Speed Sensor
42 RH Front Speed Sensor
44 LH Rear Speed Sensor
46 RH Rear Speed Sensor
55 ECU fault
57 ABS status signal low (ABS light on indicating fault with ABS system, fix this ABS fault first)
58 ABS status signal open circuit
63 Throttle motor (ETC) motor open circuit
64 Throttle motor (ETC) motor short circuit
82 On/Off switch voltage low.

A common problem is the traction control motor plug being damp.

The TC coolant temperature sensor is located in the engine ecu coolant temperature sensor on the 20XE M2.5. If this is found to be faulty it should be replaced with the correct sensor. ie a black one not a blue one.

Fault codes 39,42,44,46,57 Are faults with the ABS system not the traction control system and therefore the ABS light should be on. Fix the ABS fault and the traction control fault code should go away.

In the unlikely event no ABS fault can be found check the following wires that run between the ABS and TC ecu

Blue, Blue/green, Blue/white, Blue/red, Brown/yellow. Listed in order of faultcode numbers.

Fault codes can be read out of the Alarm by shorting pins A and H.

The code is flashed out on the ultrasonic led.

The Ultrasonic button clears the codes.

- 18 Fault with disarm signal
- 25 Horn Voltage Low - Horn O/C or fuse blown
- 26 Indicator Left open circuit
- 27 Indicator Right open circuit
- 28 Ultrasonic driver side open circuit or incorrect voltage
- 29 Ultrasonic passenger side open circuit or incorrect voltage
- 32 Boot caused an alarm condition
- 33 Bonnet caused an alarm condition
- 34 Doors caused an alarm condition
- 35 Ignition Turned on caused an alarm condition
- 36 Immobilization circuit open circuit (starter circuit triggered causing alarm)
- 37 Radio caused an alarm condition
- 38 Ultrasonic's caused an alarm condition
- 39 Fault with disarm signal. (central locking fuse blown) (causing alarm condition)
- 40 Two alarm triggers at the same time.
- 41 Spare alarm input caused alarm condition (pin 14)
- 46 Rear Window smashed caused an alarm condition ('92+ models only)
- 52 Horn Voltage Low - Horn O/C or fuse blown
- 55 ECU fault

Automatic gearbox. Short pins A and C on the diag plug

- 17 Solenoid 1-2/3-4 (Voltage Low)
- 21 Throttle Position Sensor (Voltage High)
- 22 Throttle Position Sensor (Voltage Low)
- 23 Coolant Temperature Switch (Voltage High)
- 25 Solenoid 1-2/3-4 (Voltage High)
- 26 Solenoid 2-3 (Voltage Low)
- 27 Connection Solenoid 2-3/Solenoid TCC
- 28 Solenoid 2-3 (Voltage High)
- 29 TCC Solenoid (Voltage Low)
- 31 No Engine RPM Signal
- 32 Pressure Regulator Solenoid (Voltage Low)
- 33 Pressure Regulator Solenoid (Current High)
- 36 TCC Solenoid (Voltage High)
- 38 No Transmission Input RPM Signal
- 39 No Transmission Output RPM Signal
- 41 Gear Error Hydraulic Fault (usually an internal transmission mechanical failure - forward clutch ?)
- 42 Pressure Regulator Solenoid (Short Circuit)
- 47 Down Shift Protection
- 48 Battery (Voltage Low)
- 49 Battery (Voltage High)
- 56 Selector Switch (Incorrect Signal)
- 65 AT Oil Temperature Sensor (Voltage High)
- 66 AT Oil Temperature Sensor (Voltage Low/High)
- 67 AT Oil Temperature Sensor (Voltage High)
- 75 Transmission Switch (Voltage Low)
- 76 Engine TPS Load (Signal Incorrect)
- 77 Kickdown Switch (Voltage Low)
- 78 AT Shift Time (Too Long)

Diag Connector Pinout

A Brown	Ground
B Brown/Yellow	Engine ECU
C Brown/Black	Automatic Gearbox (not models with traction control ie V6)
D Brown/Red	Fuel Computer (LCD dash - not UK models)
E Brown/Blue	Engine ECU light / Uni direction data line to engine ecu
F Red	+12v (fused via F8)
G Brown/White	Bi directional data line
H Brown/Blue	Alarm (ride control) %
J Brown/Grey	4x4 or Traction Control (* not 4x4 on M reg models on) (# not TC on later models)
K Grey	ABS

* Later models, approx 1994 Model year L reg which do not have mechanical speedo cables will have a wire in location J

approx 1995 Model year M reg do not have a wire in location J

However on both of the above, the code flash technique does not work. (Only Tech 1)

Later models which do not have a wire in location J, the Traction control code can not be read out with this flash technique.

% Later M reg + Calibra models, the Alarm codes can not be read out with this flash technique.